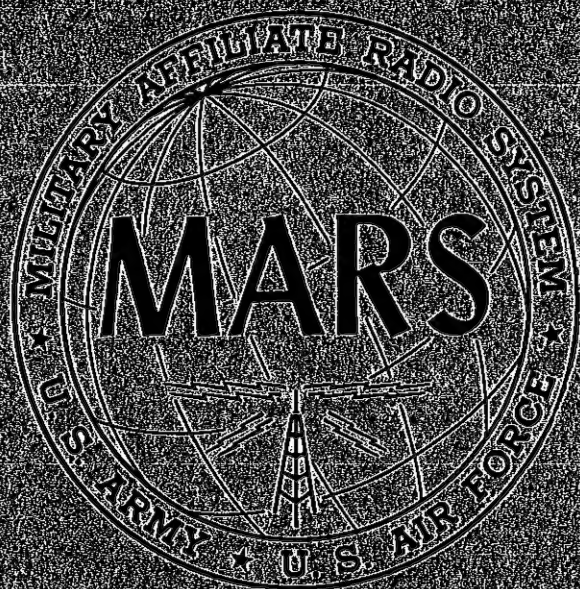


RESTRICTED

Security Information

ARMY



This document contains information affecting the national defense of the United States within the meaning of the Espionage Act, 18 U.S. Code, 793 and 794. Its transmission or the revelation of its contents in any manner to an unauthorized person is prohibited by law.

SOI

RESTRICTED

Security Information

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SIGNAL OPERATION INSTRUCTIONS
TRAINING

ITEM NO. 1-1

INDEX

HEADQUARTERS MARS (ARMY)

WASHINGTON 25, D. C.

Effective: 010001Z October 1953

Signal operation instructions listed below will govern the
operation of all Military Affiliate Radio System (MARS) - Army nets.

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OFFICIAL:

James A. Long

JAMES A. LONG
Major, Signal Corps
Chief, MARS-Army

DISTRIBUTION "S"

ITEM NO. 1-1

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~~Security Information~~

E16077

SIGNAL OPERATION INSTRUCTIONS
TRAINING

ITEM NO. 2-1

DISTRIBUTION "S"

HEADQUARTERS MARS (ARMY)

WASHINGTON 25, D. C.

Effective: Upon Receipt

Distribution of this SOI will be as follows:

	<u>No. of Copies</u>
Chief, MARS (Army)	2
MARS Director, First Army	3
MARS Director, Second Army	3
MARS Director, Third Army	3
MARS Director, Fourth Army	3
MARS Director, Fifth Army	3
MARS Director, Sixth Army	3
MARS Director, AFPE	2
MARS Director, USARCARIB	2
MARS Director, USARAL	2
MARS Director, USARPAC	2
MARS Director, EUCOM	2
MARS Director, USFA	2
Each MARS-Army Member	1
Chief, MARS (Air Force)	2

DISTRIBUTION "S"

ITEM NO. 2-1

Page 1 of 1

E15342

SIGNAL OPERATION INSTRUCTIONS
TRAINING

ITEM NO. 3-1

GENERAL COMMUNICATION INSTRUCTIONS

HEADQUARTERS MARS (ARMY)

WASHINGTON 25, D. C.

Effective: Upon Receipt

1. GENERAL

a. To provide further training in military communications this Signal Operation Instructions (SOI) has been prepared by MARS Headquarters.

b. This SOI supersedes SIG 439-1, Communication Instructions, MARS-Army, 1 August 1950 which will be destroyed by burning. No report of destruction is required.

c. New items and revisions of existing items take effect as indicated in the heading of each item. At such time, previous items are superseded and will be destroyed by burning. A new Index (Item 1-()) will be issued whenever new items or revisions are furnished.

2. CLASSIFICATION OF MESSAGES

Messages handled via MARS will normally be UNCLASSIFIED.

3. RADIO SERVICE

a. Radio procedure will be in accordance with ACP-124 and ACP-125, which cover radiotelegraph and radiotelephone procedure, respectively. The appropriate ACP will be issued to MARS members actively engaged in MARS training.

DISTRIBUTION "S"

ITEM NO. 3-1

Page 1 of 3

SIGNAL OPERATION INSTRUCTIONS
TRAINING

ITEM NO. 4-1

OFFICIAL TIME

HEADQUARTERS MARS (ARMY)

WASHINGTON 25, D. C.

Effective: Upon Receipt

1. The 24-hour clock system will be used for expressing time within MARS (Army). Time is expressed by means of a six-figure group of numerals, the first two numerals expressing the day of the month and the next four the clock time, followed by a time zone suffix letter. The time zone suffix letter is obtained as outlined in paragraph 3. When a message is referred to by its time of origin, the method of expressing such time will be exactly as presented in the original message.
2. GCT (Greenwich Civil Time) sometimes referred to as "Z Time" will be used in both the heading and text of the following:
 - a. Messages to the Department of the Army.
 - b. Messages to the U. S. Navy.
 - c. Messages which cross time zones.
3. Local time may be used in all messages other than those listed in paragraph 2 above. Its variation from GCT is indicated by suffix letters as follows:

HOURS FAST:	0	1	2	3	4	5	6	7	8	9	10	11	12
	Z	A	B	C	D	E	F	G	H	I	K	L	M
HOURS SLOW:	0	1	2	3	4	5	6	7	8	9	10	11	12
	Z	N	O	P	Q	R	S	T	U	V	W	X	Y

SIGNAL OPERATION INSTRUCTIONS
TRAINING

ITEM NO. 5-1

MEMBERSHIP

HEADQUARTERS MARS (ARMY)

WASHINGTON 25, D. C.

Effective: Upon Receipt

I. GENERAL

a. Membership in the Military Affiliate Radio System (MARS) is open to any individual (including retired personnel) of the military service, Army Reserve, National Guard of the United States, or Reserve Officers Training Corps (ROTC) who possesses a valid amateur radio operator license issued by the Federal Communications Commission or under regulations of an overseas commander.

b. Non-military, FCC licensed amateur radio operators over 21 years of age who possess a station in operation are eligible for membership.

II. ENROLLMENT

Application for membership will be submitted on DD Form 630 to the nearest MARS Director. Final approval of all applications is made by Chief, MARS (Army).

III. CERTIFICATES

a. A MARS certificate or other suitable document evidencing membership will be issued to the member.

SIGNAL OPERATION INSTRUCTIONS
TRAINING

ITEM NO. 5-1

MEMBERSHIP

HEADQUARTERS MARS (ARMY)

WASHINGTON 25, D. C.

V. REINSTATEMENT

Any amateur who has been dismissed from MARS may, upon written request, be reinstated, provided sufficient justification is furnished as to why he should be considered eligible for reinstatement.

VI. TRANSFERS

a. Any member who is transferred or who moves his station permanently from one Army Area to another will initiate a letter to Army MARS Director of the area he is leaving requesting termination of his MARS responsibilities in that area and transfer of his MARS records to the area where he is relocating.

b. The Army MARS Director of the area where the member is relocating will notify the member when transfer of records has been completed and furnish information about MARS operation in the new area.

c. If a new call sign and MARS certificate are required, they will be issued by Chief, MARS (Army) upon notification that a new FCC call sign has been assigned.

VII. MARS-NOVICE

a. A letter of authorization will be issued to MARS-Novice members in lieu of a MARS certificate. This authorization terminates when the FCC Novice Class License expires.

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SIGNAL OPERATION INSTRUCTIONS
TRAINING

ITEM NO. 10-1

AUTHENTICATION SYSTEMS

HEADQUARTERS MARS (ARMY)

WASHINGTON 25, D. C.

Effective: Upon Receipt

GENERAL

1. Authentication systems are used whenever there is doubt as to the identity of any stations in a net. A simple authentication system is described in this item. Authentication tables are contained in Item No. 11-() of this SOI. This system will be used for training purposes only. Members should not discuss the operation of the system over the air.

INSTRUCTIONS

2. a. Sample table appears below:

A

B

C X A C Y R B Z V S D U T O W E P L K J M F H G N I Q

D

E

b. Example:

(1) Test Element: CP

(2) Locate C in left-hand column; find P in row C; take letter to right of P which is L; the reply to authenticator CP is L.

DISTRIBUTION "S"

ITEM NO. 10-1

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Security Information

SIGNAL OPERATION INSTRUCTIONS
TRAINING

ITEM NO. 11-1

MARS AUTHENTICATION TABLE

HEADQUARTERS MARS (ARMY)

WASHINGTON 25, D. C.

Effective: ~~01000~~12 October 1953

A	G	U	N	A	Z	L	I	P	B	D	F	H	S	J	O	X	C	M	K	Y	E	R	T	W	V	Q
B	Z	S	M	B	O	V	Y	A	D	H	J	I	L	F	W	R	N	G	C	Q	K	P	U	X	E	T
C	W	V	F	N	K	Z	A	D	L	O	M	B	Y	U	T	E	I	H	S	C	P	Q	R	J	G	X
D	Z	O	P	M	Y	A	N	B	J	F	R	H	C	K	U	T	G	I	X	Q	W	L	V	E	S	D
E	D	Z	W	L	X	B	E	V	C	M	T	K	P	R	I	F	H	A	N	S	Y	G	O	Q	U	J
F	A	T	E	J	S	C	U	B	N	G	W	I	Z	D	Y	K	R	M	L	V	H	X	O	Q	F	P
G	N	Y	Z	F	D	A	E	Q	I	M	H	R	W	J	S	L	K	O	V	X	U	T	G	B	C	P
H	Z	Q	E	L	U	S	K	M	T	J	W	G	V	D	O	C	N	B	A	H	F	X	P	I	Y	R
I	B	T	G	Q	O	M	E	A	K	H	W	L	I	F	V	J	S	N	Y	C	D	P	Z	U	R	X
J	O	M	N	V	F	R	T	B	Q	D	J	K	W	Y	G	A	L	P	I	U	H	Z	C	E	X	S
K	N	D	O	Z	F	M	V	L	T	G	L	C	J	Q	Y	U	R	K	A	W	X	I	E	B	H	S
L	A	J	G	N	I	M	W	Q	U	B	R	F	C	O	Z	P	S	X	H	V	T	L	Y	K	E	D
M	B	Z	E	Q	X	D	A	T	U	L	K	N	H	Y	S	G	W	C	F	O	V	M	R	I	J	P
N	F	A	Q	B	U	L	T	G	Z	M	K	J	P	D	W	X	H	C	E	N	S	O	V	R	I	Y
O	L	R	W	O	M	G	A	U	F	Y	D	S	T	J	B	H	C	V	E	N	I	Q	Z	P	X	K
P	N	L	W	C	M	H	O	P	S	Z	Q	J	R	I	B	F	T	D	U	E	K	A	X	G	Y	V
Q	H	I	O	N	M	T	C	K	A	Z	S	D	E	B	X	W	J	R	P	U	F	Q	L	V	G	Y
R	N	A	C	M	I	K	V	B	U	W	E	L	O	Z	G	J	X	Y	T	R	Q	P	F	D	H	S
S	M	U	W	O	B	E	A	Y	H	Q	K	X	J	D	Z	G	R	F	C	L	P	S	N	T	V	I
T	N	A	K	M	V	H	U	F	Y	E	S	C	I	P	W	O	T	R	L	G	Q	J	Z	X	B	D
U	A	P	T	X	Z	H	V	B	W	K	M	E	I	L	R	N	D	G	Q	O	C	J	Y	F	S	U
V	N	T	I	W	B	Y	V	G	K	Q	U	J	R	D	O	S	L	C	E	P	X	H	M	Z	A	F
W	A	F	M	D	L	U	Z	P	Y	G	X	Q	S	R	B	O	J	T	N	W	I	E	V	K	H	C
X	W	E	A	P	C	O	K	D	L	V	J	H	T	U	N	B	X	Q	M	R	I	F	Z	S	G	Y
Y	Q	T	Z	A	J	F	U	G	C	O	D	Y	L	P	M	S	R	V	E	K	H	N	X	I	W	B
Z	O	C	G	V	S	W	D	Z	Y	X	R	L	A	I	U	Q	H	K	B	N	J	E	F	T	M	P

SIGNAL OPERATION INSTRUCTIONS
TRAINING

ITEM NO. 12-1

MARS CIPHER SYSTEM

HEADQUARTERS MARS (ARMY)

WASHINGTON 25, D. C.

Effective: Upon Receipt

1. The cipher system outlined in this item may be used on MARS nets for training purposes. Four lessons on the use of cipher systems have been prepared and distributed to MARS members by separate correspondence.
2. This cipher system is authorized for training purposes, subject to the following provisions:
 - a. The system offers practically no security and can be easily deciphered.
 - b. Traffic enciphered in this system will be confined to unclassified drill or training traffic. Use of this system for official military traffic or personal messages is not authorized.
 - c. Under no conditions will this system be used to encipher classified information.
 - d. Each enciphered message will include the following phrase within the text: "PAREN MARS DRILL MESSAGE PAREN". This phrase will not be enciphered.
 - e. The system will be used only on MARS frequencies.
3. Current MARS Cipher Table will be contained in Item No. 13-() of this SOI.

SIGNAL OPERATION INSTRUCTIONS
TRAINING

ITEM NO. 13-1

MARS CIPHER TABLE

HEADQUARTERS MARS (ARMY)

WASHINGTON 25, D. C.

Effective: ~~010001Z~~ 010001Z October 1953

PLAIN A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

CIPHER T U V W X Y Z A B C D E F G H I J K L M N O P Q R S

Effective: ~~010001Z~~ 010001Z January 1954

PLAIN A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

CIPHER Y Z I C E B R G A D F H J K L M N O P Q S T U V W X

Effective: ~~010001Z~~ 010001Z April 1954

PLAIN A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

CIPHER U V W X Y Z P O L K A D T B C E F G H I J M N Q R S

Effective: ~~010001Z~~ 010001Z July 1954

PLAIN A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

CIPHER O Q U V W X Y Z S H I N P L A T E R B C D F G J K M

SIGNAL OPERATION INSTRUCTIONS
TRAINING

ITEM NO. 21-1

RADIO CALL SIGNS

HEADQUARTERS MARS (ARMY)

WASHINGTON 25, D. C.

Effective: Upon Receipt

1. Call sign assignments are made by Chief, MARS (Army).
2. Assignments are based on the FCC call sign of the station or individual. Within the continental limits of the United States, the prefix "W" is changed to "A" and the prefix "K" is changed to "AA". Similar assignments are made to overseas stations.
3. When a member moves from one call area to another, his MARS call sign remains unchanged until the FCC call sign is changed. The portable suffix will not be used on MARS frequencies. Stations operating mobile on MARS frequencies are not required to give their location or indicate mobile operation unless requested to do so by the NCS.
4. A list of Amateur, MARS-Air Force and MARS-Army prefixes is contained in Item No. 24-() of this SOI.

DISTRIBUTION "S"

ITEM NO. 21-1

Page 1 of 1

SIGNAL OPERATION INSTRUCTIONS
TRAINING

ITEM NO. 22-1

RADIO FREQUENCIES

HEADQUARTERS MARS (ARMY) WASHINGTON 25, D. C.

Effective: Upon Receipt

1. MARS radio frequency assignments are made by Chief, MARS (Army).
2. The following are Army and Air Force Shared Frequencies:

<u>FREQUENCY</u>	<u>POWER INPUT</u>	<u>EMISSION</u>
3497.5 kc	1000 watts	1A1, 1.1F1
6997.5 kc	1000 watts	1A1, 1.1F1
14405.0 kc	1000 watts	1A1, 1.1F1, 3A3, 6A3
20994.0 kc	1000 watts	1A1, 1.1F1, 6A3, 4A4
27994.0 kc	1000 watts	1A1, 1.1F1, 6A3, 4A4

3. 14405 kc and 20994 kc are controlled by Headquarters Station WAR during Army time.
4. 27994 kc is available for use during Army time without restrictions. Army time is: 0001-0100Z, 0300-0500Z, 0700-0900Z, 1100-1300Z, 1500-1700Z, 1900-2100Z, 2300-2400Z, daily.
5. 3497.5 kc and 6997.5 kc assignments are contained in Appendix "A" to this item.
6. MARS-Army frequency assignments are contained in Appendix "B" to this item.

3497.5 KC

<u>MONDAY:</u>	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>	<u>V</u>	<u>VI</u>
0001-0100Z			F R E E			
0200-0300Z			VIRGINIA RATT NET			
0400-0500Z			F R E E			
0600-0700Z	x		x			
0800-0900Z		x		x		
1000-1100Z					x	x
1200-1300Z	x		x		x	
1400-1500Z			MARS/E NET			
1600-1700Z	x		x		x	
1800-1900Z		x		x		x
2000-2100Z	x			x	x	
2200-2300Z		x	x			x

6997.5 KC

<u>TUESDAY:</u>	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>	<u>V</u>	<u>VI</u>
0100-0200Z						
0300-0400Z					X	X
0500-0600Z	X		X			
0700-0800Z		X		X		
0900-1000Z					X	X
1100-1200Z	X		X		X	
1300-1400Z		X		X		X
1500-1600Z						
1700-1800Z						
1900-2000Z		X		X		X
2100-2200Z	X		X		X	
2300-2400Z	X		X			

MARS-ARMY FREQUENCIES

EFFECTIVE: 1 September 1953

<u>FREQUENCY</u>	<u>POWER INPUT</u>	<u>EMISSION</u>	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>	<u>V</u>	<u>VI</u>	<u>REMARKS</u>
2220.0	150	1A1, 3A3, 6A3, 1.1F1	B				C		
2258.0	150	1A1, 3A3, 6A3, 1.1F1				B		C	
2308.0	150	1A1, 3A3, 6A3, 1.1F1		C			B		
2360.0	150	1A1, 3A3, 6A3, 1.1F1			C		B		
3237.0	150	1A1, 3A3, 6A3, 1.1F1	A			A			
3245.0	150	1A1, 3A3, 6A3, 1.1F1			A				
3275.0	150	1A1, 3A3, 6A3, 1.1F1		A				A	
3289.0	150	1A1, 3A3, 6A3, 1.1F1					A		
4020.0	150	1A1, 3A3, 6A3	B		C		B	C	
4025.0	600	1A1, 3A3, 6A3	C	B	D	C		B	
4820.0	150	1A1					A		
5302.5	150	1A1, 3A3, 6A3, 1.1F1		C	B	A	B	C	
5760.0	150	1A1, 3A3, 6A3, 1.1F1					C	B	

NOTE: Times are GCT. Use of 1.1F1 requires prior approval of Chief, MARS (Army).

LEGEND:

- A - Assigned 24 hours daily
- B - Assigned odd hours daily
- C - Assigned even hours daily
- D - Florida, Mississippi and
Alabama only, even hours daily

SIGNAL OPERATION INSTRUCTIONS
TRAINING

ITEM NO. 23-1

RADIO NETS

HEADQUARTERS MARS (ARMY) WASHINGTON 25, D. C.

Effective: Upon Receipt

I. MARS/A NET (CW)

<u>Headquarters</u>	<u>Call Sign</u>
MARS, Army (NCS)	WAR
First Army (Alt NCS)	A2USA
Second Army	A3USA
Third Army	A4USA
Net Call Sign	WAR/A
Frequency	6997.5 kc
Time	1500-1600Z, daily

II. MARS/B NET (CW and PHONE)

<u>Headquarters</u>	<u>Call Sign</u>
MARS, Army (NCS)	WAR
Fourth Army (Alt NCS)	A5USA
Fifth Army	A9USA
Sixth Army	A6USA
Net Call Sign	WAR/B
Frequency	14405 kc
Time	1700-1800Z, daily

SIGNAL OPERATION INSTRUCTIONS
TRAINING

ITEM NO. 23-1

RADIO NETS

HEADQUARTERS MARS (ARMY)	WASHINGTON 25, D. C.
--------------------------	----------------------

V. MARS/E NET (RATT)

<u>Headquarters</u>	<u>Call Sign</u>
MARS, Army (NCS)	WAR
First Army	A2USA
Second Army	A3USA
Net Call Sign	WAR/E
Frequency	3497.5 kc
Time	1400-1500Z, daily

VI. MARS/F NET (RATT)

<u>Headquarters</u>	<u>Call Sign</u>
MARS, Army (NCS)	WAR
Third Army	A4USA
Fifth Army	A9USA
Net Call Sign	WAR/F
Frequency	6997.5 kc
Time	1700-1800Z, daily

SIGNAL OPERATION INSTRUCTIONS
TRAINING

ITEM NO. 23-1

RADIO NETS

HEADQUARTERS MARS (ARMY)

WASHINGTON 25, D. C.

IX. MARS/I NET (PHONE)

<u>Headquarters</u>	<u>Call Sign</u>
MARS, Army (NCS)	WAR
Second Army	A3USA
Net Call	WAR/I
Frequency	148.01 mc
Time	24 hours per day

NOTE: MARS stations in Washington area equipped to operate on this frequency are authorized to contact WAR or A3USA.

SIGNAL OPERATION INSTRUCTIONS
TRAINING

ITEM NO. 24-1

PREFIX LIST

HEADQUARTERS MARS (ARMY) WASHINGTON 25, D. C.

Effective: Upon Receipt

<u>COUNTRY OR AREA</u>	<u>AMATEUR</u>	<u>MARS-AF</u>	<u>MARS-ARMY</u>
1. Alaska	KL7	AK1	AL7
2. Aleutians	KL7	AK2	AL7
3. Argentina	LU	AH4	---
4. Austria	OE13	AJ7	AE6
5. Azores	CS3	AJØ	---
6. Bermuda	VP9	AH2	---
7. Bolivia	CP	AH3	---
8. Brazil	PY	AH3	---
9. British Isles	G	AJ1	---
10. Canal Zone	KZ5	AH6	AC5
11. Chile	CE	AH4	---
12. Columbia	HK	AH5	---
13. Costa Rica	TI	AH5	---
14. Cuba	CM, CO	AH2	ACØ
15. Dominican Republic	HI	AH2	---
16. East Africa (Area Coverage)	---	AJ4	AE4
17. Ecuador	HK	AH5	---
18. France	F	AJ2	AE7

SIGNAL OPERATION INSTRUCTIONS
TRAINING

ITEM NO. 24-1

PREFIX LIST

<u>HEADQUARTERS MARS (ARMY)</u>		<u>WASHINGTON 25, D. C.</u>	
<u>COUNTRY OR AREA</u>	<u>AMATEUR</u>	<u>MARS-AF</u>	<u>MARS-ARMY</u>
37. Midway Island	KM6	AJ3	---
38. Morocco	CN8	AJ5	---
39. Newfoundland & Labrador	VO	AJ9	---
40. Nicaragua	YN	AH5	---
41. Norway	LA	AJ8	---
42. Okinawa	KR6	AI2	AD2
43. Paraguay	ZP	AH3	---
44. Peru	OA	AH4	---
45. Philippine Islands	DU	AI4	AD3
46. Puerto Rico & Virgin Islands	KP4, KV4	AH2	AC4
47. Salvador	YS	AH5	---
48. Sweden	SM	AJ8	---
49. Turkey	TA	AJ6	AE3
50. United States	W & K	AF	A & AA
51. Uruguay	CX	AH3	---
52. Venezuela	YV	AH5	---
53. West Africa (Area Coverage)	---	AJ5	---

~~RESTRICTED~~
Security Information

SIGNAL OPERATION INSTRUCTIONS
TRAINING

ITEM NO. 25-1

RADIOTELEGRAPH PROCEDURE

HEADQUARTERS MARS (ARMY)

WASHINGTON 25, D. C.

Effective: Upon Receipt

1. GENERAL

The following basic rules are essential to the operation of an efficient radiotelegraph circuit:

a. No transmission will be made which has not been authorized by proper authority. MARS members are considered proper authority to originate and transmit traffic within their scope of operation.

b. The following practices are forbidden:

- (1) Violation of radio silence, whenever imposed.
- (2) Excessive tuning.
- (3) Use of other than authorized prosigns.
- (4) Profane, indecent or obscene language.
- (5) Exceeding the specific power ratings placed on MARS

frequencies.

c. The following practices will be avoided:

- (1) Use of excessive transmitting power when lower power will provide communications.
- (2) Excessive time consumed in tuning and adjusting equipment.

DISTRIBUTION "S"

ITEM NO. 25-1

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~~RESTRICTED~~
Security Information

NORMAL FORM MESSAGE

THIRD PARTY:

A3USA DE A2USA NR1

M 021224Z

FM A2USA NYK

TO MRS ROBERT SMITH
617 MAINE STREET
BALTIMORE MARYLAND

GR8 BT

ARRIVED SAFELY PD EVERYONE IS WELL SGD BOB BT

MARS ADMINISTRATIVE:

WAR DE A3USA NR1

R 031400Z

FM A3USA

TO WAR

GR19 BT

FOR LONG SGD WAYMAN PD REQUEST ONE ZERO COPIES ABLE CHARLIE PETER
ONE TWO FOUR BE FURNISHED THIS OFFICE BT

ABBREVIATED FORM MESSAGE

A3YA DE A3WIQ BT

THIS STATION NOW EQUIPPED WITH TYPEWRITER BT

MARS TO AMATEUR

Received via MARS

WAR DE AJ5AB NR21

NM 081223Z

FM AJ5AB FRENCH MOROCCO

TO MRS JOHN DOE

123 SPRING DRIVE

KANSAS CITY KANSAS

GRLO BT

PACKAGE AND LETTER RECEIVED PD LETTER FOLLOWS PD SGD JACK BT

Refiled via Amateur

NR31 K4USA CK7 FRENCH MOROCCO VIA MARS 1223 MAY 8

TO MRS JOHN DOE

123 SPRING DRIVE

KANSAS CITY KANSAS BT

PACKAGE AND LETTER RECEIVED X LETTER FOLLOWS BT

JACK BT

Q AND Z SIGNALS

<u>SIGNAL</u>	<u>QUESTION</u>	<u>ANSWER</u>
QRK	What is the readability of my signals (or those of ---)?	The readability of your signals (or those of ---) is --- (1 to 5).
QRM	Are you being interfered with?	I am being interfered with.
QRN	Are you troubled by static?	I am troubled by static.
QRQ	Shall I send faster?	Send faster (--- W.P.M.).
QRS	Shall I send more slowly?	Send more slowly (---W.P.M.).
QRT	Shall I stop sending?	Stop sending.
QRU	Have you anything for me?	I have nothing for you.
QRV	Are you ready?	I am ready.
QRX	When will you call me again?	I will call you again at --- hours (on --- kcs (or mcs)).
QRZ	Who is calling me?	You are being called by --- (on --- kcs (or mcs)).
QSA	What is the strength of my signals (or those of ---)?	The strength of your signals (or those of ---) is --- (1 to 5).
QSB	Are my signals fading?	Your signals are fading.
QSL	Can you acknowledge receipt.	I am acknowledging receipt.
QSO	Can you communicate with --- direct or by relay?	I can communicate with --- direct (or by relay through ---).
QSP	Will you relay to --- free of charge?	I will relay to --- free of charge.
QSV	Shall I send a series of V's on this frequency (or --- kcs (or mcs))?	Send a series of V's on this frequency (or --- kcs (or mcs)).
QSY	Shall I change to transmission on another frequency?	Change to transmission on another frequency (or on --- kcs (or mcs)).

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APPENDIX "D" TO
ITEM NO. 25-1
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PROSIGNS

<u>PROSIGN</u>	<u>MEANING</u>
<u>AA</u>	Unknown station
AA	All after
AB	All before
<u>AR</u>	End of transmission
<u>AS</u>	Wait
B	More to follow
<u>BT</u>	Long break
C	Correct
DE	From
EEEEEEEE	Error
F	Do not answer
FM	Originator's sign
G	Repeat back
GR(numeral)	Group count
GRNC	Groups not counted
<u>HM</u> (3 times)	Emergency silence sign
II	Separative sign
<u>IMI</u>	Repeat
INFO	Information addressee sign
<u>INT</u>	Interrogatory
<u>IX</u>	Execute to follow

APPENDIX "D" TO
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SIGNAL OPERATION INSTRUCTIONS
TRAINING

ITEM NO. 26-1

RADIOTELEPHONE PROCEDURE

HEADQUARTERS MARS (ARMY)

WASHINGTON 25, D. C.

Effective: Upon Receipt

1. GENERAL

The following basic rules are essential to the operation of an efficient radiotelephone circuit:

a. Transmissions by radiotelephone will be as short and concise as possible consistent with clearness. Adherence to prescribed procedure is mandatory. Unauthorized departure from or variation in prescribed procedure creates confusion, reduces reliability and speed, and tends to reduce security precautions.

b. No transmission will be made which has not been authorized by proper authority. MARS members are considered proper authority to originate and transmit traffic within their scope of operation.

c. The following practices are forbidden:

(1) Violation of radio silence, whenever imposed.

(2) Excessive tuning.

(3) Use of other than authorized prowords.

(4) Profane, indecent or obscene language.

(5) Exceeding the specific power ratings placed on MARS frequencies.

DISTRIBUTION "S"

ITEM NO. 26-1

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PHONETIC ALPHABET

<u>LETTER</u>	<u>SPOKEN AS</u>	<u>LETTER</u>	<u>SPOKEN AS</u>
A-----	ABLE	N-----	NAN
B-----	BAKER	O-----	OBOE
C-----	CHARLIE	P-----	PETER
D-----	DOG	Q-----	QUEEN
E-----	EASY	R-----	ROGER
F-----	FOX	S-----	SUGAR
G-----	GEORGE	T-----	TARE
H-----	HOW	U-----	UNCLE
I-----	ITEM	V-----	VICTOR
J-----	JIG	W-----	WILLIAM
K-----	KING	X-----	XRAY
L-----	LOVE	Y-----	YOKE
M-----	MIKE	Z-----	ZEBRA

PRONUNCIATION OF NUMERALS

<u>NUMERAL</u>	<u>SPOKEN AS</u>	<u>NUMERAL</u>	<u>SPOKEN AS</u>
0-----	ZERO	5-----	FI-YIV
1-----	WUN	6-----	SIX
2-----	TOO	7-----	SEVEN
3-----	THUH-REE	8-----	EIGHT
4-----	FO-WER	9-----	NINER

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Security Information

APPENDIX "B" TO
ITEM NO. 26-1
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EQUIVALENT TO

PROWORD

EXPLANATION

OVER-----This is the end of my transmission
to you and a response is necessary.
Go ahead; transmit.

ROGER-----I have received your last transmission
satisfactorily.

SAY AGAIN-----Repeat all of your last transmission.
Followed by identification data means
"Repeat" (portion indicated).

SPEAK SLOWER-----Your transmission is at too fast a speed.
Reduce speed of transmission.

THAT IS CORRECT-----You are correct, or what you have trans-
mitted is correct.

THIS IS-----This transmission is from the station
whose designation immediately follows.

TIME-----That which immediately follows is the
time or date-time group of the message.

UNKNOWN STATION-----The identity of the station with whom
I am attempting to establish communication
is unknown.

WAIT-----I must pause for a few seconds.

WAIT OUT-----I must pause longer than a few seconds.

WORD AFTER-----The word of the message to which I have
reference is that which follows.

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E 1 5 8 8 5

SIGNAL OPERATION INSTRUCTIONS
TRAINING

ITEM NO. 27-1

RADIOTELETYPEWRITER OPERATION

HEADQUARTERS MARS (ARMY)

WASHINGTON 25, D. C.

Effective: Upon Receipt

1. The use of 1.1F1 (RATT) emission on MARS frequencies requires prior approval of Chief, MARS (Army). Item No. 22-1 contains a list of the MARS frequencies that are cleared for RATT operation.
2. The following RATT schedules have been approved by Chief, MARS (Army):

- a. Virginia RATT Net: 3497.5 kc - 1800-1900Z; 2200-2300Z, Saturday.
0200-0300Z; 1800-1900Z;
2200-2300Z, Sunday.
0200-0300Z, Monday.
6997.5 kc - 2100-2200Z, Saturday.
0100-0200Z; 2100-2200Z, Sunday.
- b. Third Army RATT Net: 6997.5 kc - 0500-0600Z; 0700-0800Z, Saturday.
0500-0600Z; 0700-0800Z, Sunday.
14405.0 kc - 0500-0700Z, daily.
- c. Fifth Army RATT Net: 2360.0 kc - 0100-0200Z, daily.
3289.0 kc - 0300-0400Z, daily.
- d. Sixth Army RATT Net: 14405.0 kc - 0100-0300Z, daily,
(except Tuesday).